

New and Known Species of *Porphyrops* from North America (Diptera, Dolichopodidae).

By M. C. VAN DUZEE, Buffalo, New York.

Porphyrops slossonae Johnson.

Psyche, Vol. xiii, p. 59, June, 1906 (*Leucostola*).

Mr. C. W. Johnson sent me a specimen labeled *Leucostola slossonae* which proves to be a typical *Porphyrops*. It answers his description well.

This species is almost like *Porphyrops elegantula* Meig., having the same form of hypopygial appendages and antennæ; it is not quite as brightly colored, it differs in having the upper edge of fore femora black. The fore tarsi in *slossonae* are yellow with last four joints darker, but only the last joint black, the joints as 39-17-15-13-13; middle tarsi with their joints as 60-28-20-12-13; joints of hind tarsi as 47-50-32-20-14. First joint of anterior tarsi considerably enlarged below at tip. The fore femora have short, the middle ones longer, white hairs below, those on the middle pair nearly as long as the width of the femora. Middle tibiæ black on the whole of their lower surface, upper edge black on apical fourth. There is a row of six small black bristles on each side, back of the upper orbital cilia ending in the post-vertical bristle. Length 7.3 mm.

P. elegantula Meig., according to Dr. Becker, has the fore femora wholly yellow; hind femora and tibiae becoming blackish at tip; hind tarsi black, first joint shorter than second; first joint of fore tarsi thickened below at tip, as long as the four following joints (as long as the two following joints, Dr. Lundbeck) outer hypopygial lamellæ simple, narrow, tapering, as long as the height of the hypopygium; inner appendages a little enlarged and hollowed at tip (spoon-shaped). *Elegantula* has been taken in Alaska by both Prof. Hine and Dr. Aldrich.

Porphyrops barbipes new species.

♂. Length 5.3 mm. Face narrow, silvery white; front green. Antennæ black; third joint nearly as long as the face; arista as long as the antennæ. The long white beard abundant and reaching the upper fourth of the eye, the upper orbital cilia short, black.

Thorax green, shining, with a spot of white pollen on each side extending from the humeri to the suture and a blackish spot above the root of the wing; scutellum with four marginal bristles.

Abdomen green, apical segments almost black, spots of white pollen and long white hair on the sides. Hypopygium not very large, its outer lamellæ as long as the height of the hypopygium, curved, of equal width, not tapering, fringed with pale hairs; inner appendages not quite one-third as long as the outer, straight, blunt, divergent.

Coxæ, femora, hind tibiæ and hind tarsi black. Coxæ with long white hair, middle and hind pairs with a black thorn at tip; tips of fore and middle femora and their tibiæ yellow. Fore femora on posterior surface, middle pair below and hind ones on anterior surface with abundant, long, white hair. Fore tarsi yellow, infuscated towards their tips, first joint slightly compressed, a very little hollowed below beyond their middle and with a row of about seven blunt teeth on the middle of lower edge; joints of fore tarsi as 37-17-13-8-8. Middle tarsi black from the tip of first joint. Joints of hind tarsi as 48-37-16-15-15. Calypters and halteres yellow, the former with white cilia.

Wings very slightly tinged with brown; third and fourth veins approach each other a little but are parallel towards their tips.

♀. Two females that seem to belong with this male have the face wide, white, rounded below, its suture below the middle; third antennal joint about half as long as in the male; beard not conspicuous, except on lower part of the head; coxæ, fore and hind femora, and posterior tibiæ and their tarsi black; all trochanters, entire middle femora, and fore and middle tibiæ yellow; fore tarsi infuscated from the tip of the first joint; middle tarsi mostly blackish; wings as in the male, still more tinged with brown.

Described from one pair (male *holotype*, female *allotype*) taken at Machias, Maine, July 21 and 22; and one female found at Princeton, Maine, July 12; all were taken by C. W. Johnson and are in the collection of the Boston Society of Natural History.

Porphyrops johnsoni new species.

♂. Length 5-5.5 mm. Face narrow, silvery white. Front shining green. Antennæ black; third joint about as long as the height of the front; arista apical, a little longer than the antennæ. Beard long, abundant, white; upper orbital cilia black, rather short.

Thorax dark shining green; scutellum with four large marginal bristles. Abdomen green, its incisures black or bronze, hairs on its dorsum black, those on the sides and venter long and white. Hypopygium black, not very large; its outer lamellæ rather short, black, of about equal width to the tip, which is somewhat truncate; inner appendages small.

Coxæ black with long white hair, middle pair with black bristles at tip, these do not form a thorn. Femora black, fore and middle pairs with yellow tips, the former with long white hair on posterior surface; middle ones with long white hair on both anterior and posterior edges below. Hind femora with rather long, black, stiff hairs on outer surface and lower inner edge. Fore and middle tibiæ and most of their tarsi yellow. Hind tibiæ and tarsi wholly black. Joints of fore

tarsi as 37-11-9-4-10; of hind tarsi as 40-37-25-11-12. Calypters and halteres yellow, the former with white cilia.

Wings grayish; third and fourth veins bent so as to approach each other a little, but parallel towards their tips; last section of fifth vein as long as the cross-vein.

♀. A female that seems to belong with these males has the antennæ very nearly like the male's; face wide with its sides parallel, rounded below, its suture just above lower third; the white hair forming the beard, on the coxæ and on the fore and middle femora much shorter than in the male, the black hair on the hind femora also short.

Described from three males and one female. The *holotype*, a male, was taken at Lahaway, Ocean Co., New Jersey; the female (*allotype*) was taken by Nathan Banks, at Falls Church, Virginia, May 16; one of the other males was taken at Jeffrey, New Hampshire, June 18, and the other at Kingston, Rhode Island, June 17, by C. W. Johnson. Holotype and allotype in the author's collection.

***Porphyrops brevicornis* new species.**

♂. Length 4 mm. Face rather wide above, narrow below, silvery white. Front green, dulled with gray pollen. Antennæ black; third joint scarcely longer than wide at base, conical; arista apical, about twice as long as the antennæ. Beard sordid whitish, not very abundant for the genus; the black upper orbital cilia extend down to about upper fourth of eye height; there is only one pair of postvertical bristles.

Thorax green, dulled with brownish pollen and with a brown stripe on each side of the acrostichal bristles.

Abdomen green, with a few white hairs on the sides, that are longest on first segment. Hypopygium black; its outer lamellæ are long, narrow, brown, ribbon-like, of nearly equal width throughout, fringed with pale hairs on one side, if stretched out they would nearly reach the ventral edge of second segment; the inner appendages are a pair of straight organs, slightly widened at tip and reaching the ventral edge of fourth segment.

Coxæ and femora black, tips of the latter narrowly yellow. Fore and middle coxæ with long sordid whitish hair, middle ones without a thorn at tip. Fore femora with long delicate white hair on posterior surface, middle pair with only short hair. Tibiæ yellow, hind pair black at tip, the black shading into the yellow and reaching to or beyond the middle on posterior side. Fore and middle tarsi yellowish, darker at tip, the former just equal to their tibiæ in length, their joints as 28-13-12-9-9, first joint a little widened at tip below. Fore tibiæ

with rather long hair on lower surface. Middle tarsi with their joints as 32-23-15-10-9. Hind tarsi wholly black, their joints as 40-55-20-14-9. Calypters and halteres yellow, the former with white cilia.

Wings tinged with brown; third and fourth veins slightly arched so as to approach each other, being nearest together at tips; last section of fourth only a little arched, without a distinct bend; last section of fifth vein twice as long as the cross-vein.

♀. Face very wide, yellowish white; front nearly opaque with brown pollen. Antennæ as in the male; thorax dulled with brown pollen, the brown stripes can scarcely be traced, but the central band has less pollen. Coxæ blackish with very short pale hairs; fore femora yellowish on anterior, black on upper and posterior surfaces; middle femora wholly yellow, still the upper edge is dark; hind femora yellow with the tip black above; tibiæ yellow, hind pair with apical two-fifths black and slightly black at extreme base; tarsi colored about as in the male.

Described from two males and one female, taken by Mr. Cole at Hood River, Oregon, the males on June 2 and the female on April 21. *Types* in the author's collection.

***Porphyrops ornatus* new species.**

♂. Length 5 mm. Face narrow, silvery white. Front green. Antennæ black, third joint as long as the face; arista apical, as long as third joint. Beard moderately long, white; the black orbital cilia reach down nearly to the middle of the eye, there are three postvertical bristles on each side.

Thorax shining green with a brown stripe on each side of the acrostichal bristles; scutellum with two pairs of marginal bristles, the outer ones much smaller than the inner pair; in one male there is a pair of marginal hairs between the central bristles.

Abdomen green with bronze brown incisures and the usual white hairs on the sides. Hypopygium black with short, black, stiff hairs; its outer lamellæ long, slender, tapering, blackish with yellow base, fringed with pale hairs; inner appendages slender, curved, yellowish, reaching the ventral edge of fourth segment.

Coxæ black with white hair; middle pair with a long black thorn at tip. Fore femora black more or less yellow on anterior surface, broadly yellow at tip, their lower posterior surface with long white hair, upper posterior surface with three small black bristles near the tip. Middle femora and basal half or more of hind femora yellow, the latter with nearly the apical half black; middle and hind femora each with a few small yellow hairs below. Fore and middle tibiæ yellow, the former with a little silver pollen on posterior surface. Hind tibiæ black with basal half of upper and about basal third of lower surface yellow. Fore tarsi with the first two joints yellow, last four infuscated;

the first is much widened below at tip; second joint two-thirds as wide as long, being nearly as wide as the tip of the first; joints of fore tarsi as 33-12-11-9-6. Middle tarsi black from the tip of first joint, their joints as 48-27-17-9-9, the first joint has several longer hairs at base below. Hind tarsi wholly black, their joints as 48-40-21-18-14. Calypters and their cilia yellow; knob of halteres yellow, stem brown.

Wings slightly tinged with brown; third and fourth veins considerably bent, approaching each other and again separating just before their tips; last section of fifth vein one and one-half times as long as the cross-vein.

♀. Face wide, rounded below, its suture at its middle; antennae small, third joint about as long as the two basal joints taken together; arista more than twice as long as the antennae. Femora and tibiae colored about as in the male, except that the hind tibiae are yellow with about apical third black; femora with short hair; fore tarsi plain, blackened from the tip of the first joint. Wings about as in the male.

Described from two males and two females; the males were taken at Colden, Erie County, New York, July 9 and 23; the females at Lancaster, Erie County, New York, June 2. *Types* in the collection of the author.

The Nesting Habits of *Odynerus pedestris* Sauss, and *Stenancistrocerus saecularis* Sauss (Hymen.; Eumenidae).

Odynerus or more correctly *Stenodynerus pedestris* was found nesting in a sumac twig. A mud plug sealed the aperture of this burrow. Upon splitting the twig it was found that this was an old gallery made by the bee, *Ceratina calcarata*, and only the top $2\frac{3}{4}$ inches was used by the present occupant. This tenant had made a mud floor at the aforementioned point and another mud wall at the top for a plug. The space of $2\frac{3}{4}$ inches contained three cells, two of which had dead larvae, and the third had an adult wasp ready to emerge; this was the condition of the nest on August 7, 1922.

I was very much surprised when Mr. S. A. Rohwer identified this wasp as *S. pedestris*, since this wasp is described in our "Wasp Studies Afield" as one that burrows in clay banks. Both specimens were resubmitted for verification, the one that recently emerged from the twig, and the specimen whose behavior was described in the aforementioned work; reexamination proves that the inhabitant of the twig is *Stenodynerus pedestris* and the name of the burrower in the clay bank should be corrected to *Stenancistrocerus saecularis* Sauss.

I regret very much that this error has crept in, and the object of this note is to correct the name of the wasp, whose behavior is described on pages 332-334 of the above book to *Stenancistrocerus saecularis* Sauss.

PHIL RAU, St. Louis, Missouri.